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VOLUME 97 SECTION 3 1960

PORIFERA

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LONDON
PUBLISHED BY
THE ZOOLOGICAL SOCIETY OF LONDON

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1963

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VOL. 97

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Tropical

Atlantic.—Caribbean and Florida, **de Laubenfels** and **Storr, Lévi** and **(1), Tabb** and **Manning,** W. Africa, **Lévi** and **(1), Vacelet.**

Indo-Pacific.—Madras, **Ali,** Natal, **Lévi** and **(1),** Zanzibar, Indonesia, **Vacelet.**

South Temperate and Sub-Antarctic

S. Atlantic.—S. Africa, **Lévi (3), Vacelet.**

Australia.—Vacelet.

Antarctica

Ross Sea.—Bullivant.

GEOLOGICAL

Cambrian.—Argentine, **Poulsen**; Morocco, **Debrenne** and **(3), (4)**; Spain, **Rusconi**; U.S.S.R., **Grigoriev, Jaroshevich** and **(1), Maslov, Rozanov, Vologdin** and **(1), (2), (3), (5), (6), Yakovlev, Zhuravleva** and **(1), (2), (3), (4), Zhuravleva** and **Repina, Zhuravleva, Repina** and **Khomentovskii, Zhuravleva** and **Zelenov.**

Ordovician.—Canada, **Colquhoun**; Northern Malaya, **Kobayashi**; U.S.A., **Pestana.**

Silurian.— ———

Devonian.—Australia, **Howell** and **(2), (3).**

Lr. Carboniferous.—U.S.S.R., **Arendt.**

Mississippian.—Pennsylvanian, U.S.A., **Sass.**

Pennsylvanian.—Texas, U.S.A., **Finks.**

Permian.—Branson, Australia, **Howell (4)**; Japan, **Akagi**; Texas, U.S.A., **Finks.**

Permo-Triassic.—Italy, **Redini.**

Triassic.—U.S.S.R., **Kiparisova.**

Jurassic.—Germany, **Geyer, Seibold,** E. and I.; Spain, **Bataller**; Switzerland, **Leischner.**

Cretaceous.—Poland, **Hurcewicz,** U.S.A., **Howell (1).**

Tertiary.—Paris Basin, France, **Rouvillois.**

III.—SYSTEMATIC INDEX

Note.—The classification is according to L. H. Hyman, 1940, with the addition of the order *Lithistida* for fossil genera which cannot be classified otherwise.

References to the "Titles" are by the name(s) of the Author(s).

CALCAREA

†*Amblysiphonella yoshinoi* **sp. n.**, pp. 69–70, pl. v, figs. 1–7, *chinense* Hayasaka, p. 70, pl. v, figs. 8–16, cf. *dichotoma* (Yabe), pp. 70–71, Permian, Japan, **Akagi,** S.

Amphoriscus dohrni **sp. nov.**, Mediterranean, Ischia, **Sarà,** M. (2), pp. 446–7, fig. 2, pl. XII A.

Clathrina cerebrum (Haekel), p. 443, *contorta* (Bowerbank), pp. 443–4, *falcata* (Haekel), *lacunosa* (Johnston), p. 444, Mediterranean, Ischia, **Sarà, M.** (2).

Grantessa nemurensis Hozawa, Akkeshi Bay, Hokkaido, **Hozawa,** S. and **Tanita,** S., p. 421, fig. 1.

Grantia uchidai **sp. nov.**, Akkeshi Bay, Hokkaido, **Hozawa,** S. and **Tanita,** S., p. 422, text-figs. 2–4.

†*Hodsia caucasica* Moisseiev, Triassic, U.S.S.R., **Kiparisova,** L., p. 54, pl. 2, fig. 1.

Leucandra cerebrum **sp. nov.**, Akkeshi Bay, Hokkaido, **Hozawa,** S. and **Tanita,** S., p. 426, text-figs. 5, 6.

Leucetta primigenia Haekel, Mediterranean, Ischia, **Sarà,** M. (2), p. 445.

Leuconia aspera (O. Schmidt), Mediterranean, Ischia, **Sarà,** M. (2), p. 445.

Leucosolenia parthenopea **sp. nov.**, Mediterranean, Ischia, **Sarà,** M. (2), pp. 444–5.

†*Molengraafia regularis* V. de Regny, Triassic, U.S.S.R., **Kiparisova,** L., pp. 53–4, pl. 1, fig. 1;

†*M. regularis* V. de Regny var. *caucasica* Moisseiev, Triassic, U.S.S.R., **Kiparisova,** L., pp. 53–4, pl. 1, fig. 1.

†*Polypatina* **gen. nov.** pp. 46–7, type species, *okensis* **sp. nov.**, Carboniferous, U.S.S.R., **Arendt,** Y. A., pp. 47–52, 1 pl., text-figs.

†*Porosphaera globularis* (Phillips), Up. Cretaceous, Poland, **Hurcewicz,** H., pp. 433–44, pls. 1, 2.

†*Sahraja triassica* Moisseiev, Triassic, U.S.S.R., **Kiparisova,** L., p. 55, pl. 1, fig. 2.

Sycon elegans (Bowerbank), *raphanus* O. Schmidt, *sp.*, Mediterranean, Ischia, **Sarà,** M. (2), p. 445.

Ute glabra O. Schmidt, Mediterranean, Ischia, **Sarà,** M. (2), p. 445.

HEXACTINELLIDA

†*Acanthocoryna* **gen. nov.**, p. 128, type species, *stauroma* **sp. nov.**, Permian, U.S.A., **Finks,** R. M., pp. 129–30, pl. 44, figs. 2–6; pl. 45, figs. 1–6.

†Brachiospongioidea **superfam. nov.**, pp. 115–8, for Brachiospongiidae, Docodermatidae, Stiodermatidae **fam. nov.**, ? Stromatitididae **fam. nov.**, ? large lyssacine spicules, **Finks,** R. M.

†*Carphites* **gen. nov.**, p. 125, type species, *plectus* **sp. n.**, pp. 125–7, pl. 43, figs. 1, 2, 5, 6; pl. 44, fig. 1; pl. 46, figs. 3, 6–8, *diabloensis* **sp. n.**, pp. 127–8, pl. 42, fig. 8; pl. 43, figs. 3–4, Permian, U.S.A., **Finks,** R. M.

†*Chancelloria eros* Walcott, Cambrian, Argentine, **Poulsen,** V., p. 5.

†*Clathrospongia abacus* Hall, Lr. Carboniferous, U.S.A., **Sass,** D. B., pp. 300–302, pl. 28, figs. 1, 2.

†*Discophyma costata* Hérenger, Jurassic, Spain, **Bataller,** J. R., pp. 59–60.

†Docodermatidae **fam. nov.**, pp. 118–120, for ? *Astroconia*, ? *Tholiasterella*, *Docoderma* **gen. nov.**, *Carphites* **gen. nov.**, ? *Acanthocorya* **gen. nov.**, **Finks,** R. M.

†*Docoderma* **gen. nov.** pp. 120–1, type species *rigida* **sp. n.**, pp. 121–3, pl. 33, fig. 5; pl. 39, figs. 1–6; pl. 40, figs. 1–3, 8–11; pl. 41, figs. 1–2; text-figs. 74–6, *papillosum* **sp. n.** pp. 123–4, pl. 41, figs. 3–6; pl. 42, figs. 1–7; 9; *sp.*, p. 125, Permian, U.S.A., **Finks,** R. M.

†*Ectenodictya carlli* (Hall & Clarke), Lr. Carboniferous, U.S.A., **Sass,** D. B., pp. 303–309, pl. 28, fig. 1; pl. 29, fig. 1; pl. 30, figs. 1–3.

†*Endoplegma* **gen. nov.** pp. 105–6, type species *calathus* **sp. n.**, Permian, U.S.A., **Finks,** R. M., pp. 106–7, pl. 85, figs. 1, 6–11.

†Euplectelloidea **superfam. nov.** p. 139, for Euplectellidae, Pileolitidae, **Finks,** R. M.

†*Laocaetis americana* **sp. n.**, Cretaceous, U.S.A., **Howell,** B. F. (1), p. 8, pl. ii, figs. 1–5.

†*Microstaura* **gen. nov.** p. 103, type species *doliolum* **sp. n.**, Permian, U.S.A., **Finks,** R. M., pp. 103–5, pl. 34, figs. 1–14.

Pheronema grayi Sav.Kent, Mediterranean, Corsica, S. France, **Vacelet,** J., pp. 259–60.

†Pileolitidae **fam. nov.** p. 139, for *Pileolites* **gen. nov.**, Permian, U.S.A., **Finks,** R. M.

†*Pileolites* **gen. nov.** pp. 139–40, type species *baccatus* **sp. n.**, Permian, U.S.A., **Finks,** R. M., pp. 139–141, pl. 19, figs. 8–10; pl. 50, figs. 1–13.

†*Plocoscyphia pusilla* **sp. n.**, Cretaceous, U.S.A., **Howell,** B. F. (1), p. 4, pl. i, figs. 1–3.

†*Polylophidium* **gen. nov.** p. 110, type species *discus* **sp. n.**, Permian, U.S.A., **Finks,** R. M., pp. 111–2, pl. 36, figs. 14–18.

†Protospongioidea **superfam. nov.** pp. 101–2, for Protospongiidae, Teganiidae, Dictyspongiidae, Stereodictyidae, Hyphantaeniidae, **Finks,** R. M.

† ? *Protospongia* sp., Cambrian, Argentine, **Poulsen,** V., p. 5.

†*Pseudoporospongia tarraconensis* Hérenger, Jurassic, Spain, **Bataller, J. R.,** p. 60.

†*Rugosoderma* **gen. nov.** pp. 6–7, type species *texasense* **sp. n.**, Cretaceous, U.S.A., **Howell,** B. F. **(1),** p. 7, pl. 1, figs. 7–9.

†*Sestrocladiella* **gen. nov.** pp. 5–6, type species, *bifurca* **sp. n.**, Cretaceous, U.S.A., **Howell,** B. F. **(1),** p. 6, pl. i, figs. 4–6.

†Stereodictyidae **fam. nov.** pp. 107–8, for *Stereodictyum* **gen. nov.**, Permian, U.S.A., **Finks,** R. M.

†*Stereodictyum* **gen. nov.** p. 108, type species *orthoplectum* **sp. n.**, Permian, U.S.A., **Finks,** R. M., pp. 108–110, pl. 37, figs. 1–8 ; pl. 38, figs. 1–7 ; text-fig. 73.

†Stiodermatidae **fam. nov.** pp. 130–2, for *Stioderma* **gen. nov.** [=*Hyalostelia* Zittel pars.], ? *Hyalostelia* Zittel pars., ? *Rhakistella* Weller, **Finks,** R. M.

†*Stioderma* **gen. nov.** pp. 132–3, type species *coscinum* **sp. n.**, Pennsylvanian-Permian, **Finks,** R. M., pp. 133–6, pl. 47, figs. 1–9 ; pl. 48, figs. 1–9 ; pl. 49, figs. 1, 2, 6, 7.

†Stromatidiidae **fam. nov.** p. 136, for *Stromatidium* Girty, Permian, U.S.A., **Finks,** R. M.

†*Stromatidium typicale* Girty, Permian, U.S.A., **Finks,** R. M., pp. 137–8, pl. 44, figs. 7–9, text-fig. 77.

DEMOSPONGIAE

Clathreidae, revision and redescription, pp. 50–61, figs. 1–8, **Lévi,** C. **(1).**

Sub-Class I

TETRACTINELLIDA

MYXOSPONGIDA

Oscarella lobularis (O. Schmidt), Mediterranean, Ischia, **Sarà,** M. **(2),** p. 450.

CARNOSA

Corticum bowerbanki **sp. nov.,** Mediterranean, Ischia, **Sarà,** M. **(2),** pp. 448–50, fig. 3, pl. XII B.

Chondrosia reniformis Nardo, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 450.

Nethea dissimilis **sp. n.,** Mediterranean, Naples, **Sarà,** M. **(3),** p. 2, fig. 1.

Pachastrella monilifera (Schmidt), W. Africa, **Lévi,** C., p. 748 ; *P. monilifera* O. Schmidt, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 448.

Plakortis simplex Schulze, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 450.

Triptolemus simplex **sp. n.,** Mediterranean, Naples, **Sarà,** M. **(3),** p. 5, fig. 2.

CHORISTIDA

Ancorina cerebrum O. Schmidt, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 447.

Chondrilla nucula Schmidt, Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 564.

Cinachyra alloclada Uliczka, W. Africa, **Lévi,** C., pp. 746–7, fig. 2 ; *C. cavernosa* Lamarck, Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 564.

Craniella cranium (Müller), W. Africa, **Lévi,** C., p. 746.

Erylus discophorus (O. Schmidt), *euastrum* (O. Schmidt), Mediterranean, Ischia, **Sarà,** M. **(2),** p. 447 ; *E. discophorus* (Schmidt), Mediterranean, Corsica, **Vacelet,** J., p. 260.

Geodia cydonium (Jameson), Mediterranean, Ischia, **Sarà,** M. **(2),** p. 447 ; *G. cydonium* (Jameson), Mediterranean, Corsica, S. France, **Vacelet,** J., p. 260.

Penares helleri (O. Schmidt), Mediterranean, Ischia, **Sarà,** M. **(2),** p. 448.

Stelletta hispida (Buccich), W. Africa, **Lévi,** C., pp. 747–8, fig. 3 ; *S. grubii* O. Schmidt, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 448 ; *S. dorsigera* Schmidt, *grubii* Schmidt, Mediterranean, S. France, **Vacelet,** J., p. 261.

LITHISTIDA

†*Actinocoelia* **gen. nov.** p. 70, type species *maeandrina* **sp. n.**, Permian, U.S.A., **Finks,** R. M., pp. 70–72, pl. 16, figs. 4–9, pl. 17, figs. 1–2, pl. 19, figs. 8–10, text-figs. 36–38.

† ? *Actinocoelia* **gen. nov.,** *verrucosa* **sp. n.,** Permian, U.S.A., **Finks,** R. M., pp. 72–3, pl. 17, figs. 3–7, pl. 18, figs. 1–2.

†*Anthaspidella inyoensis* **sp. n.,** Ordovician, U.S.A., **Pestana,** H. R., pp. 864–5, pl. 109, fig. 7.

†Anthracosyconidae **fam. nov.** pp. 76–7 for *Anthracosycon collatipora* **gen. nov.,** *Dactylites* **gen. nov.,** Permian, U.S.A., **Finks,** R. M.

†*Anthracosycon ficus* Girty, pp. 78–9, pl. 20, figs. 1–5, text-figs. 41–44, *regulare* (King), pp. 79–80, pl. 20, figs. 6–11; pl. 21, figs. 1–2, text-figs. 45–50, Permian, U.S.A., **Finks,** R. M.

† ? *Anthracosycon auriforme* **sp. n.** pp. 80–1, pl. 21, figs. 3–4, Permian, U.S.A., **Finks,** R. M.

† Cf. *Archaeoscyphia*, Ordovician, Malaya, **Kobayashi,** T., pp. 389–91, fig. 2.

†*Chaunactis* **gen. nov.** pp. 93–4, type species *foliata* **sp. n.,** pp. 94–5, pl. 28, figs. 9, 10; pl. 29, *sp.* 1, p. 95, pl. 30, figs. 1–6, *sp.* 2, pp. 95–6, pl. 31, figs. 1–3, Pennsylvanian, Permian, U.S.A., **Finks,** R. M.

†Chiastonellid gen. et sp. undet., Permian, U.S.A., **Finks,** R. M., pp. 73–4, pl. 10, figs. 9–10 ; pl. 11, fig. 1.

†*Coelocladia spinosa* Girty, Pennsylvanian, U.S.A., **Finks,** R. M., pp. 51–2, pl. 5, figs. 1–8; pl. 6, figs. 1–13; pl. 7, figs. 4–6 ; pl. 8, fig. 9.

†*Coelocladiella* **gen. nov.** pp. 52–3, type species *lissa* **sp. n.,** pp. 53–4, pl. 7, figs. 7–9; pl. 8, fig. 8, *philoconcha* **sp. n.,** pp. 54–5, pl. 8, figs. 1–7, Pennsylvanian, Permian, U.S.A., **Finks,** R. M.

†*Collatipora* **gen. nov.** p. 81, type-species *discreta* **sp. n.,** pp. 81–2, pl. 21, fig. 6; pl. 22, figs. 1–5; pl. 24, fig. 9, *delicata* **sp. n.** pp. 82–3, pl. 22, figs. 6–12, Permian, U.S.A., **Finks,** R. M.

† ? *Collatipora pyriformis* **sp. n.** pp. 83–4, pl. 23, figs. 1–13, text-figs. 51–55, Permian, U.S.A., **Finks,** R. M.

Crambe chelastra **sp. n.,** S. Africa, **Lévi,** C. **(3),** pp. 1–3, figs. 1–3.

†*Defordia,* type species *defuncta* King, pp. 66–7, pl. 12, figs. 3–6; pl. 13, figs. 1–9, text-figs. 8–20, *densa* **sp. n.** pp. 67–8, pl. 14, figs. 3–6, 10, text-figs. 21–26, cf. *densa* pp. 68–9, pl. 14, figs. 7–9, text-figs. 27–30, *lobata* **sp. n.** p. 69, pl. 15, figs. 5–12, *sp.* pp. 69–70, pl. 15, figs. 1–4, text-figs. 31–35, Permian, U.S.A., **Finks,** R. M.

†*Dactylites* **gen. nov.** p. 84, type species *micropora* **sp. n.** pp. 84–5, pl. 19, figs. 8–10; pl. 24, figs. 1–5, text-figs. 56–9, Permian, U.S.A., **Finks,** R. M.

† ? *Dactylites subdigitatus* **sp. n.** pp. 85–6, pl. 24, figs. 6–8, text-figs. 60–64, Permian, U.S.A., **Finks,** R. M.

†*Haplistion aeluroglossa* **sp. n.** pp. 89–90, pl. 19, figs. 8–10; pl. 26, figs. 9–12; pl. 27, figs. 1–2, *skinneri* (King), pp. 90–1, pl. 27, fig. 5; pl. 28, figs. 1–2, text-figs. 65–72, *sphaericum* **sp. n.** pp. 91–2, pl. 25, figs. 1–6; pl. 26, figs. 1–3, *megalochetus* **sp. n.** pp. 92–3, pl. 28, figs. 3–7, *sp.,* p. 93, pl. 28, fig. 8, Pennsylvanian, Permian, **Finks,** R. M.

† Heliospongiidae **fam. nov.** pp. 40–43 for *Heliospongia, Coelocladia,* possibly *Coelocladiella.* Pennsylvanian-Permian, U.S.A., **Finks,** R. M.

†*Heliospongia excavata* King, pp. 45–7, pl. 1, figs. 1–6; pl. 2, figs. 1, 2, 5–8; pl. 3, fig. 1, *ramosa* Girty, pp. 47–8, pl. 2, fig. 3; pl. 3, figs. 2–4, *vokesi* King, pp. 48–50, pl. 1, fig. 7; pl. 2, figs. 4, 9; pl. 4, figs. 1–5, Pennsylvanian, Permian, U.S.A., **Finks,** R. M.

†*Insulipora* **gen. nov.** p. 64, type species *elegans* **sp. n.,** Permian, U.S.A., **Finks,** R. M., pp. 64–5, pl. 11, figs. 2–10; pl. 12, figs. 1–2.

†*Jereina* **gen. nov.** p. 74, type species *cylindrica* **sp. n.,** p. 75, pl. 16, figs. 1–3; pl. 18, figs. 3–8; pl. 19, figs. 1–2; *ramosa* **sp. n.** pp. 75–6, pl. 19, figs. 3–7, text-figs. 39, 40, Permian, U.S.A., **Finks,** R. M.

†*Laubenfelsia australiensis* **sp. n.,** Permian, Australia, **Howell,** B. F. **(4),** p. 33, pl. iii, figs. 1–2.

†*Multistella* **gen. nov.** pp. 61–2, *porosa* **sp. n.,** Permian, U.S.A., **Finks,** R. M., pp. 62–3, pl. 9, figs. 1–3; pl. 10, figs. 3–8.

†*Paramelonella* **gen. nov.** p. 30, type species *etheridgei* **sp. n.,** pp. 30–31, pl. ii, figs. 1, 2, *lata* **sp. n.** pp. 31–32, pl. ii, figs. 3, 4, Permian, Australia, **Howell,** B. F. **(4).**

†*Paramorphospongia globosa* **sp. n.** (type species), Permian, Australia, **Howell,** B. F. **(4),** pp. 34–5, pl. ii, fig. 11.

†*Phacellopegma schizoderma* **sp. n.,** Pennsylvanian, U.S.A., **Finks,** R. M., pp. 60–61, p.l 9, figs. 4–6, pl. 10, figs. 1–2.

†*Scheiia tuberosa* Tschernyschew, Permian, U.S.A., **Finks,** R. M., pp. 98–9, pl. 32, figs. 1–7; pl. 33, figs. 1, 7.

†*Striataspongia* **gen. nov.** p. 1, type species *cylindrica* **sp. n.,** Devonian, Australia, **Howell,** B. F., pp. 1–2, pl. i, figs. 1–3.

†*Stylopegma singularis* **sp. n.** pp. 32–3, pl. ii, figs. 8–10, *incerta* **sp. n.** p. 33, pl. ii, figs. 5–7, Permian, Australia, **Howell,** B. F. **(4).**

Sub-Class II

MONAXONIDA

HADROMERINA

Aaptos aaptos (O. Schmidt), Mediterranean, Ischia, **Sarà,** M. **(2),** pp. 450–1.

†*Cliona celata* Grant, Chalk, Germany, **Nestler,** H., pp. 650–1; †*C. celata micropora* **subsp. nov.,** Chalk, Germany, **Nestler,** H., pp. 650–1; *C. vastifica* (Hancock) W. Africa, **Lévi,** C., p. 748; *C. copiosa* **sp. n.,** Mediterranean, Naples, **Sarà,** M. **(3),** p. 8, pl. 1 A–B, text-fig. 3; *C. viridis* (O. Schmidt) Gray, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 451; *C. caribbaea* Carter, Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563; *C. celata* Grant, *viridis* (Schmidt), Mediterranean, Corsica, S. France, **Vacelet,** J., p. 261.

Cryptotethya crypta de Laubenfels, Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 564.

Diplastrella bistellata (O. Schmidt) Topsent, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 451.

Laxosuberites ectyoninus Topsent, Mediterranean, Corsica, **Vacelet,** J., pp. 262–3, fig. 3.

Placospongia melobesiodes Gray, Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563.

Polymastia agglutinans Ridley & Dendy, W. Africa, **Lévi,** C., pp. 749–50.

Rhizaxinella pyrifera (delle Chiaze) Vosmaer, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 451; *R. pyrifera* (Delle Chiaze), *gracilis* (Leudenfeld), Mediterranean, S. France, **Vacelet,** J., p. 263.

Siphonidium ramosum Schmidt, Mediterranean, Corsica, **Vacelet,** J., p. 260.

Spirastrella cunctatrix O. Schmidt, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 451.

Suberites domuncula Nardo, W. Africa, **Lévi,** C., p. 749; *S. carnosus* (Johnston) Gray, p. 451, *S. domuncula* (Olivi) Nardo, p. 452, Mediterranean, Ischia, **Sarà,** M. **(2);** *S. domuncula* (Olivi), Mediterranean, S. France, **Vacelet,** J., p. 262.

Tethya aurantium (Pallas), W. Africa, **Lévi,** C., p. 748, fig. 4; *T. aurantium* (Pallas), Mediterranean, Ischia, **Sarà,** M. **(2),** p. 450; *T. aurantium* (Pallas), Mediterranean, Corsica, S. France, **Vacelet,** J., p. 261; *T. serica* Lebwohl, Japan, **Watanabe,** Y., pp. 145–148, figs. 1–4.

Timea fasciata Topsent, Mediterranean, Ischia, **Sarà,** M. **(2),** p. 451.

Weberella verrucosa **sp. n.,** Mediterranean, Corsica, **Vacelet,** J., pp. 261–2.

HALICHONDRINA

Acanthella acuta Schmidt, Mediterranean, Corsica, **Vacelet, J.**, p. 263.

Axinella polypoides Schmidt, W. Africa, **Lévi, C.**, p. 750 ; *A. damicornis* (Esp.) O Schmidt, *polypoides* O. Schmidt, Mediterranean, Ischia, **Sarà, M. (2)**, p. 452 ; *A. damicornis* (Esper), *verrucosa* (Esper), *polypoides* Schmidt, Mediterranean, Corsica, S. France, **Vacelet, J.**, p. 263.

Bubaris vermiculata (Bowerbank), Mediterranean, Ischia, **Sarà, M. (2)**, p. 452 ; *B. vermiculata* (Bowerbank), Mediterranean, Corsica, **Vacelet, J.**, p. 265.

Ciocalypta penicillus Bowerbank, Mediterranean, S. France, **Vacelet, J.**, p. 269.

Halichondria aurantiaca (O. Schmidt), p. 454, *convolvens* **sp. nov.** pp. 455–6, fig. 5, pl. XII E, *panicea* (Pallas), p. 456, Mediterranean, Ischia, **Sarà, M. (2)**.

Halicnemia patera Bowerbank, Mediterranean, Ischia, **Sarà, M. (2)**, p. 452.

Hemimycale ambigua **sp. nov.** pp. 452–4, fig. 4, pl. XII C, *columella* (Bowerbank), p. 454, pl. XII D, Mediterranean, Ischia, **Sarà, M. (2)**.

Higginsia tethyoides **sp. n.**, W. Africa, **Lévi, C.**, pp. 752–4, fig. 8.

Pseudaxinella lunaecharta Ridley & Dendy, W. Africa, **Lévi, C.**, p. 750, fig. 5.

Pseudotrachya oxystyla **sp. n.**, Mediterranean, Ischia, **Sarà, M. (4)**, pl. 1, fig. 1.

Rhaphidectyon spinosum Topsent, W. Africa, **Lévi, C.**, p. 752, fig. 7.

Rhaphidostyla marsillii Topsent, Mediterranean, Ischia, **Sarà, M. (2)**, p. 454.

Sigmatoxella annexa (Schmidt), Mediterranean, S. France, **Vacelet, J.**, pp. 265–6.

Stylaxinella **gen. nov.** p. 264, for *Spongia stuposa* Esper (=*Chalina digitata* Schmidt), **Vacelet, J.**

Stylaxinella **gen. nov.** p. 264, *stuposa* (Esper), Mediterranean, S. France, **Vacelet, J.**, p. 265, fig. 4.

Stylotella incisa (Schmidt), *marsillii* Topsent, Mediterranean, Corsica, **Vacelet, J.**, p. 264.

Topsentia genitrix (O. Schmidt), Mediterranean, Ischia, **Sarà, M. (2)**, p. 456.

Tylodesma digitata **sp. n.**, W. Africa, **Lévi, C.**, pp. 751–2, fig. 6.

POECILOSCLERINA

Acanthacarnus levii **sp. n.**, Mediterranean, Corsica, **Vacelet, J.**, pp. 267–9, fig. 5.

Acarnus tortilis Topsent, Mediterranean, Ischia, **Sarà, M. (2)**, p. 461.

Anchinae coriaceus (Fristedt), *fictitius* (Bowerbank) **Gray**, p. 457, *tenacior* Topsent, pp. 457–8, Mediterranean, Ischia, **Sarà, M. (2)**.

Antho involvens Schmidt, Roscoff, Marseilles, pp. 76–8, *involvens* var. *inconstans* Topsent, Quiberon, Naples, pp. 78–80, *erecta* Ferrer-Hernandez, Santander, p. 80, **Lévi, C. (1)** ; *A. involvens* (Schmidt), Mediterranean, S. France, **Vacelet, J.**, p. 267.

Artemisina hispanica Ferrer-Hernandez, p. 83, *transiens* Topsent, pp. 83–4, Spain, **Lévi, C. (1)** ; *Artemisina ? paradoxa* Babic, Adriatic, **Lévi, C. (1)**, pp. 85–6.

Axociella pachyaxia **sp. n.**, W. Africa, **Lévi, C.**, p. 763–4, fig. 16.

Burtonanchora myxilloides **sp. n.**, W. Africa, **Lévi, C.**, pp. 758–9, fig. 12.

Clathria compressa Schmidt, W. Africa, **Lévi, C.**, p. 761, fig. 14 ; *C. coralloides* (Olivi) Schmidt, Mediterranean, pp. 61–2, *compressa* Schmidt, Mediterranean, Senegal, p. 62, *toxistricta* Topsent, Naples, pp. 62–3, *cantabrica* (Orueta), Spain, p. 63, *anchorata*, N. France, W. Ireland, pp. 63–4, **Lévi, C. (1)** ; *C. oxeifera* Ferrer-Hernandez, Palma, **Lévi, C. (1)**, pp. 84–5 ; *C. gradalis* Topsent, *toximajor* Topsent (?), p. 461, *toxistricta* Topsent, *toxitenuis* Topsent, p. 462, Mediterranean, Ischia, **Sarà, M. (2)**.

Crella mollior Topsent, Mediterranean, Ischia, **Sarà, M. (2)**, p. 457 ; *C. nodulosa* **sp. n.**, Mediterranean, Naples, **Sarà, M. (3)**, p.11, fig. 4.

Desmacidon fruticosum (Montagu), W. Africa, **Lévi, C.**, pp. 765–6, fig. 18 ; *D. fruticosum* (Montagu), Mediterranean, S. France, **Vacelet, J.**, p. 266.

Dictyoclathria morisca (Schmidt), W. Africa, **Lévi, C.**, pp. 761–2, fig. 15 ; *D. morisca* (Schmidt), var. *anisotyla* **var. nov.**, W. Africa, **Lévi, C.**, pp. 761–2, fig. 15 ; *D. morisca* (O. Schmidt), Mediterranean, Ischia, **Sarà, M. (2)**, p. 462.

Ectyon ovoides (O. Schmidt), Mediterranean, Ischia, **Sarà, M. (2)**, p. 462.

Eurypon cinctum **sp. n.** pp. 459–60, fig. 6, *sp.*, pp. 460–1, fig. 7, Mediterranean, Ischia, **Sarà, M. (2)**.

Hamacantha johnsoni (Bowerbank), W. Africa, **Lévi, C.**, p. 758 ; *H. falcula* (Bowerbank), Mediterranean, Corsica, **Vacelet, J.**, p. 266.

Hymedesmia dujardini (Bow.) var. *pulposa* (Topsent), *nigrescens* (Topsent) ?, *versicolor* Topsent, Mediterranean, Ischia, **Sarà, M. (2)**, p. 458.

Leptolabis brunnea Topsent, Mediterranean, Ischia, **Sarà, M. (2)**, pp. 458–9.

Microciona ditoxa Stephens, W. Ireland, pp. 65–7, *strepsitoxa* Hope, N. France, Mediterranean, p. 67, *toximajor* Topsent, Naples, pp. 67–9, *tenuissima* Stephens, W. Ireland, p. 69, *toxitenuis* Topsent, Naples, Marseilles, p. 69, *duplexa* Sarà, Naples, pp. 69–70, *chelifera* **sp. n.**, Sicily, p. 70, *haplotoxa* Topsent, Madeira, La Skira, p. 70, *macrochela* **sp. n.**, Roscoff, pp. 70–2, *cleistochela* Topsent, Naples, Banyuls, p. 72, *atrasanguinea* Bowerbank, N. France, pp. 72–3, *armata* Bowerbank, Roscoff, Sidmouth, pp. 73–5, *gradalis* (Topsent), W. Mediterranean, p. 75, *acanthotoxa* Stephens, W. Ireland, Isle of Man, p. 75, *spinarcus* Carter & Hope, N. France, Spain, p. 76, *assimilis* (Topsent), Adriatic, Naples, Marseilles, p. 76, **Lévi, C. (1)** ; *M. toxivaria* **sp. n.**, p. 14, pl. 1 C, text-fig. 5, *toxistyla* **sp. n.**, p. 17, fig. 6, Mediterranean, Naples, **Sarà, M. (3)**.

Mycale fusiformis **sp. n.** pp. 754–5, fig. 9, *massa* (Schmidt), pp. 755–6, fig. 10, *syrinx* (Schmidt), pp. 756–7, fig. 11, W. Africa, **Lévi,** C. ; *M. contrarenii* (Mart.), *massa* (O. Schmidt), Mediterranean, Ischia, **Sarà,** M. (2), p. 456 ; *M. massa* (Schmidt), p. 266, *syrinx* (Schmidt), p. 267, Mediterranean, S. France, **Vacelet,** J.

Myxilla rosacea (Lieberkühn), W. Africa, **Lévi,** C., p. 758 ; *M. iotrochotina* Topsent, p. 456, *rosacea* (Lieberkühn), pp. 456–7, Mediterranean, Ischia, **Sarà,** M. (2) ; *M. rosacea* (Lieberkühn), Mediterranean, S. France, **Vacelet,** J., p. 267.

Ophlitaspongia seriata (Grant), N. France, **Lévi,** C. (1), pp. 64–5.

Plocamilla coriacea (Bowerbank), W. Africa, **Lévi,** C., pp. 760–1.

Plocamilla coriacea (Bowerbank) var. *elegans* (Ridley & Dendy), W. Africa, **Lévi,** C., pp. 760–1 ; *P. coriacea* Bowerbank, pp. 80–1, *circonflexa* **sp. n.,** pp. 81–3, N. France, **Lévi,** C. (1).

Pytheas digitifera Lévi, W. Africa, **Lévi,** C., pp. 764–5, fig. 17.

Raspacione robusta Sarà., Mediterranean, Ischia, **Sarà,** M. (2), p. 461.

Raspailia vinimalis Schmidt, Mediterranean, S. France, **Vacelet,** J., p. 265.

Rhaphidophlus jolicœuri Topsent, Naples, Banyuls, Monaco, Dakar, **Lévi,** C. (1), p. 65.

Tedania anhelans (Lieberkühn), W. Africa, **Lévi,** C., p. 759 ; *T. anhelans* (Lieberkühn), Mediterranean, Ischia, **Sarà,** M. (2), p. 457 ; *T. ignis* (Duchassaing & Michelotti), Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563.

HAPLOSCLERINA

Adocia varia Sarà, p. 462, *venata* **sp. n.,** pp. 462–3, fig. 8, pl. XIII B, *sp.*, p. 463, pl. XII F, Mediterranean, Ischia, **Sarà,** M. (2).

Callyspongia procumbens (Carter), Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563.

Calyx nicæensis (Risso), Mediterranean, Corsica, **Vacelet,** J., p. 269.

Carterius stepanowi Dybowski (and gemmules), Germany, **Kessler,** L., p. 375.

Foliolina peltata Schmidt, W. Africa, **Lévi,** C., pp. 766–7.

Gellius angulatus (Bowerbank), p. 464, *apertus* **sp. n.,** p. 464, fig. 9, Mediterranean, Ischia, **Sarà,** M. (2).

Haliclona cinerea (Grant), p. 464, *cratera* (O. Schmidt), p. 465, Mediterranean, Ischia, **Sarà,** M. (2) ; *H. viridis* (Duchassaing & Michelotti), Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563.

Homaxinella rudis (Verrill), Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563.

Ochridaspongia rotunda Arndt, p. 173, fig. 67, Mediterranean, Balkans, **Stanković,** S.

Pachychalina sp., Mediterranean, Ischia, **Sarà,** M. (2). p. 465.

Pellina semitubulosa (Lieberkühn), O. Schmidt, Mediterranean, Ischia, **Sarà,** M. (2), p. 465.

Petrosia ficiformis Poiret, Mediterranean, Ischia, **Sarà,** M. (2), p. 465 ; *P. ficiformis* (Poiret), Mediterranean, Corsica, **Vacelet,** J., p. 269.

Phlocodictyon perforatum **sp. n.,** Mediterranean, Ischia, **Sarà,** M. (2), pp. 465–7, fig. 10, pl. XIII A.

Reniera aquaeductus Schmidt, Mediterranean, Corsica, **Vacelet,** J., p. 269.

Siphonochalina expansa **sp. nov.,** Mediterranean, Ischia, **Sarà,** M. (2), pp. 467–8, fig. 11, pl. XIII C–G ; *S. coriacea* Schmidt, Mediterranean, S. France, **Vacelet,** J., p. 269.

Spongilla sponginosa **sp. n.,** S. Carolina, U.S.A., **Penney,** J. T. (1), pp. 112–4, pl. 1, figs. 1–3 ; *S. fragilis* (Leidy), pp. 142, 145, 172–3, fig. 59, *stankovići* Arndt, p. 142, 145, 172–3, Mediterranean, Balkans, **Stanković,** S.

Taprobane spirophora **sp. n.,** W. Africa, **Lévi,** C., p. 745, fig. 1.

Sub-Class III

KERATOSA

Aplysilla sulfurea (Schulze), Mediterranean, Ischia, **Sarà,** M. (2), p. 468.

Cacospongia scalaris Schmidt, Mediterranean, Corsica, **Vacelet,** J., p. 271.

Dendrilla acantha Vacelet, W. Africa, **Lévi,** C., pp. 767–8 ; *D. cirsioides* Topsent, Mediterranean, S. France, **Vacelet,** J., p. 270.

Dysidea fragilis (Montagu), p. 468, *avara* (O. Schmidt)) pp. 468–9, Mediterranean, Ischia, **Sarà,** M. (2) ; *D. fragilis* (Montagu), Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563 ; *D. avara* (Schmidt), *fragilis* (Montagu), *tupha* (Martens), Mediterranean, S. France, **Vacelet,** J., pp. 270–1.

Fasciospongia cavernosa (Schmidt), Mediterranean, Corsica, **Vacelet,** J., p. 271.

Hippiospongia kerion **sp. n.** p. 117, figs. 3, 4, Dodecanese, **de Laubenfels,** M. W. and **Storr,** J. F.

Hippospongia communis (Lamarck), Mediterranean, Ischia, **Sarà,** M. (2), p. 469.

Hircinia fasciculata (Esper), W. Africa, **Lévi,** C., p. 767.

Ircinia fasciculata (Pallas) var. *variabilis* O. Schmidt, pp. 469–70, *oros* O. Schmidt, p. 470, Mediterranean, Ischia, **Sarà,** M. (2) ; *I. campana* (Lamarck), *fasciculata* (Pallas), Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563 ; *I.* (*Sarcotragus*) *muscarum* (Schmidt), Mediterranean, Corsica, S. France, **Vacelet,** J., p. 271.

Oligoceras collectrix Schulze, Mediterranean, Corsica, **Vacelet,** J., p. 271.

Pleroplysilla spinifera (Schulze), Mediterranean, Ischia, **Sarà,** M. (2), p. 468.

Spongia anclotea **sp. n.** p. 106, figs. 15–16, *sterea* **sp. n.** p. 108, figs. 6, 23, *cheirio* **sp. n.** p. 112, figs. 18, 24, *graminea tampa* **subsp. n.** p. 110, figs. 9–10, Florida, **de Laubenfels,** M. W. and **Storr,** J. F. ; *S. officinalis* L. var. *adriatica* O. Schmidt, *virgultosa* (O. Schmidt), Mediterranean, Ischia, **Sarà,** M. (2), p. 469 ; *S. agaricina* Pallas, Mediterranean, Corsica, **Vacelet,** J., p. 271.

Verongia aerophoba (Nardo), W. Africa, **Lévi,** C., p. 767 ; *V. cavernicola* Vacelet, Mediterranean, Ischia, **Sarà,** M. (2), p. 469 ; *V. longissima* (Carter), Florida Bay, **Tabb,** Q. C. and **Manning,** R. B., p. 563 ; *V. cavernicola* Vacelet, Mediterranean, Corsica, **Vacelet,** J., p. 271.

CLASS UNCERTAIN

†Evinospongiae, Permo-Trias, Italy, **Redini,** R., pp. 364–8, pls. 5, 6.

†*Receptaculites occidentalis* Salter, Ordovician, Canada, **Colquhoun,** D. J., pp. 90–91.

†*Sphaerospongia teicherti* **sp. n.,** Devonian, Australia, **Howell,** B. F. (3), pp. 2–3, pl. 1, figs. 1–4.

ARCHAEOCYATHA

Archaeocyatha, History of research, pp. 674–5, **Debrenne** (1).

†*Ajacicyathellus* **gen. nov.** p. 64, *hollardi* **sp. n.,** Cambrian, Morocco, **Debrenne,** F. (4), p. 64, pl. I, figs. 8–10.

†*Ajacicyathus echinatus* **sp. n.** p. 16, pl. 3, figs. 3, 4a, cf. *sinuosus* Bornemann, p. 17, pl. 3, fig. 5, Cambrian, Morocco, **Debrenne,** F. (3) ; *A. clarus* Vologdin, Cambrian, Morocco, **Debrenne,** F. (4), p. 62, pl. 1, figs. 1, 2 ; *A. khemtschikensis* (Vologdin), pp. 37–8, pl. 4, figs. 2–5, text-fig. 5 ; *sp.* pp. 38–9, pl. 4, fig. 6, Cambrian, U.S.S.R., **Zhuravleva,** I. T. (4) ; *A. discoformis* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva,** I. T. and **Zelenov,** K. K., pp. 68–9, figs. 1–2.

†*Annulocyathus krasnopeevae* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva,** I. T. and **Zelenov,** K. K., pp. 72–3, pl. 1, figs. 5–6.

†*Annulofungia taylori* (Krasn.), Cambrian, U.S.S.R., **Zhuravleva,** I. T. (4), pp. 42–3, pl. 3, figs. 3–4.

†Archaeocyathida **nom. nov.** pp. 11–12, for Archaeocyathidae, Dictyocyathidae, **Zhuravleva,** I. T. (4).

†*Archaeocyathus taissensis* **sp. n.,** Cambrian, Morocco, **Debrenne,** F. (4), p. 63, pl. II, figs. 3–7 ; *A. erbiensis* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva,** I. T. (4), pp. 20–1, text-fig. 1.

†*Archaeofungia naletovi* Vologdin, Cambrian, Morocco, **Debrenne,** F. (3), pp. 22–23, pl. 5, figs. 4–6.

†*Archaeolynthus vologdini* **sp. n.,** Cambrian, U.S.S.R., **Yakovlev,** V. N., pp. 855–7, pl. 1.

†*Cambrocyathellus tschuranicus* Zhuravleva, Cambrian, U.S.S.R., **Zhuravleva,** I. T. (2), pp. 23, 35, text-figs. 2, 4, pl. 1, fig. 4.

†*Clathricoscinus tichomirovi* Rosanov, Cambrian, U.S.S.R., **Zhuravleva,** I. T. (2), pl. 1, fig. 1.

†*Coscinocyathus minutus* **sp. n.** pp. 7–8, pl. 1, figs. 1–3, *equiporus* **sp. n.** pp. 8–9, pl. 1, fig. 4, *anthemis* Bornemann, pp. 9–10, pl. 1, fig. 5, *compositus* Zhuravleva, pp. 10–11, pl. 2, figs. 1–3, *equivallum* Taylor, pp. 11–12, pl. 2, fig. 4, *loculatus* Vologdin, p. 12, pl. 2, fig. 5, cf. *elongatus* Bornemann, pp. 13–14, text-fig., Cambrian, Morocco, **Debrenne,** F. (3) ; *C. compositus* **sp. n.** pp. 27–8, pl. 2, fig. 5 ; *sp.*, pp. 28–30, text-fig. 3, Cambrian, U.S.S.R., **Zhuravleva,** I. T. (4).

†*Dictyocyathus tenerrimus* Bornemann, Cambrian, Morocco, **Debrenne,** F. (3), pp. 17–18, pl. 3, fig. 6.

†*Dokidocyathus regularis* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva,** I. T. and **Zelenov,** K. K., pp. 67–8, pl. 1, figs. 7–8.

†*Erbocyathus krasnopeevae* **sp. n.,** pp. 1016–7, pl. 1, *chakassiensis* **sp. n.,** p. 1017, pl. 1, Cambrian, U.S.S.R., **Yaroshevich,** V. M. (1).

†*Erismacoscinus* **gen. nov.** p. 65, *marocanus* **sp. n.,** Cambrian, Morocco, **Debrenne,** F. (4), pp. 65–66, pl. III, figs. 11–16 ; *E. marocanus* Debrenne, Cambrian, Morocco, **Debrenne,** F. (3), pp. 14–15, pl. 3, fig. 1.

†*Ethmophyllum gukiticum* **sp. n.** p. 1193, fig. 1 a, b, *vitimicum* **sp. n.** pp. 1193–5, fig. 1 c, d, *jangudicum* **sp. n.** p. 1195, fig. 1 e, f, Cambrian, U.S.S.R., **Vologdin,** A. G. (1) ; *Ethmophyllum sp.*, Cambrian, U.S.S.R., **Zhuravleva,** I. T. (4), pp. 45–6, pl. 6, fig. 7 ; *E. heckeri* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva,** I. T. and **Zelenov,** K. K., pp. 69–71, figs. 3, 4, text-fig. 7.

†*Formosocyathus alabini* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva,** I. T. (3), p. 152, figs. 2 i, k.

†*Geniculicyathus* **gen. nov.** p. 118, type species *varius* **sp. n.,** Cambrian, Morocco, **Debrenne,** F., p. 118, fig. A.

†*Kidrjasocyathus* **gen. nov.** p. 43, type species *uralensis* **sp. n.,** Cambrian, U.S.S.R., **Rozanov,** A. Y., pp. 43–6, pl. 1, fig. 1, text-fig. 1.

†*Kijacyathus* **gen. nov.** p. 149, type species *chomentovskii* **sp. n.,** Cambrian (Lr.), U.S.S.R., **Zhuravleva,** I. T. (3), p. 149, figs. 2 b–d.

†*Ladaecyathus* **gen. nov.** pp. 43–4, type species *Tegerocyathus limbatus* Zhuravleva, 1955, Cambrian, U.S.S.R., **Zhuravleva,** I. T., p. 44, pl. 1, figs.

†*Leecyathus* **gen. nov.** p. 495, type species *Archaeocyathus yavorskii* Vologdin, Cambrian, U.S.S.R., **Vologdin,** A. G. (5), pp. 495–6, text-fig. 3 ; *L. mikhnoi* **sp. nov.,** Cambrian, U.S.S.R., **Vologdin,** A. G. (6), pp. 1106–8, pl. 2.

†*Leiocyathus* **gen. nov.** p. 1190, type species *inaequitaenialis* **sp. n.,** Cambrian, U.S.S.R., **Vologdin,** A. G., p. 1190, fig. 2.

†*Lenocyathus* **gen. nov.** p. 73, type species *lenaicus* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva,** I. T. and **Zelenov,** K. K., pp. 73–5, pl. 2, figs. 5–8.

†**Loculocyathida nom. nov.** pp. 9–10, for Archaeolynthidae, Dokidocyathidae, Loculocyathidae, Thalamocyathidae, Ethmophyllidae, Tercyathidae, **Zhuravleva, I. T. (4).**

†*Loculocyathus abadiei* **sp. n.,** Cambrian, Morocco, **Debrenne, F. (3),** p. 19, pl. 4, figs. 3, 4 ; *L. proprius* **sp. n.** pp. 33–5, text-fig. 4 ; *membranivestites* Vologdin, pp. 35–6, pl. 2, figs. 1, 2, Cambrian, U.S.S.R., **Zhuravleva, I. T. (4).**

†*Lucyathus* **gen. nov.** p. 495, type species *elegans* **sp. n.,** Cambrian, U.S.S.R., **Vologdin, A. G., (5),** p. 495, text-figs. 1, 2.

†*Metaldetes* cf. *cylindricus* Taylor, Cambrian, Morocco, **Debrenne, F. (3),** p. 20, pl. 4, figs. 5, 6.

†*Mukhnocyathus* **gen. nov.** p. 307, type species *zolaensis* **sp. nov.,** Cambrian, U.S.S.R., **Maslov, A. B.,** pp. 307–9, pl. 2.

†*Nochoroicyathus mirabilis* Zhuravleva, Cambrian, U.S.S.R., **Zhuravleva, I. T. (2),** p. 38, text-fig. 5.

†*Paranacyathus tuberculatus* (Vologdin), p. 33, text-fig. 3 ; *sp.* pl. 1, fig. 2, Cambrian, U.S.S.R., **Zhuravleva, I. T. (2).**

†Piamaecyathidae **fam. nov.** pp. 44–5, for *Piamaecyathus* **gen. nov.,** Cambrian, U.S.S.R., **Zhuravleva, I. T.**

†*Piamaecyathus* **gen. nov.** p. 45, type species *sajanicus* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva, I. T.,** p. 45, pl. 1, fig.

†*Protopharetra concentricus* **sp. n.,** p. 18, pl. 4, figs. 1, 2, *densa* Bornemann, pp. 20–21, pl. 5, figs. 1, 2, *polymorpha* Bornemann, pp. 21–22, pl. 5, fig. 3, Cambrian, Morocco, **Debrenne, F. (3).**

†*Retecoscinus retetabulae* (Vologdin), Cambrian, U.S.S.R., **Zhuravleva, I. T. (2),** pl. 1, fig. 3.

†*Retecyathus operosus* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva, I. T. (4),** pp. 22–5, text-fig. 2.

†Serligocyathidae **fam. nov.** p. 1189, for *Serligocyathus* and *Leiocyathus* **gen. nov., Vologdin, A. G.**

†*Serligocyathus* **gen. nov.** p. 1189, type species *lukashevi* **sp. n.,** Cambrian, U.S.S.R., **Vologdin, A. G.,** pp. 1189–90, figs. 1, 1 a, 4.

†*Syringocyathus* Vologdin redescribed and attributed to Erbocyathidae Vologdin & Zhuravleva, Cambrian, U.S.S.R., **Zhuravleva, I. T.,** pp. 42–3; *S. aspectabilis* Vologdin, Cambrian, U.S.S.R., **Zhuravleva, I. T.,** p. 43, pl. 1, figs.

†*Szecyathus* **gen. nov.** p. 493, type species *cylindricus* **sp. n.** p. 494, text-fig. 1, *irregularis* **sp. n.** p. 494, text-fig. 1, Cambrian, U.S.S.R., **Vologdin, A. G. (5).**

†*Taeniaecyathellus* **gen. nov.** pp. 45–6, type species *semenovi* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva, I. T.,** p. 46, pl. 1, fig.

†*Tannuolacyathus* **gen. nov.** p. 496, type species *multipex* **sp. n.,** Cambrian, U.S.S.R., **Vologdin, A. G. (5),** p. 496, text-fig. 4.

†*Tchojacyathus* **gen. nov.** p. 46, type species *validus* **sp. n.,** Cambrian, U.S.S.R., **Rozanov, A. Y.,** pp. 46–7, pl. 1, fig. 2.

†*Tegerocyathus limbatum* **sp. n.** pp. 46–8, pl. 5, figs. 3, 4 ; *mirabilis* **sp. n.** p. 48, text-fig. 6, Cambrian, U.S.S.R., **Zhuravleva, I. T. (4).**

†*Tercyathus sp.*, Cambrian, U.S.S.R., **Zhuravleva, I. T.,** p. 44, pl. 1, fig.

†*Tersia adhaesiva* Vologdin, p. 159, fig. 2, *reticulata* **sp. n.** pp. 159, 161, fig. 2, *curvata* **sp. n.** p. 161, fig. 2, *densiuscula* **sp. n.** p. 161, fig. 2, Cambrian, U.S.S.R., **Vologdin, A. G. (2).**

†*Thalamocyathus trachealis* Taylor, Cambrian, Morocco, **Debrenne, F. (3),** pp. 15–16, pl. 3, fig. 2 ; *T. howelli* (Vologdin), Cambrian, U.S.S.R., **Zhuravleva, I. T. (3),** pp. 152–3, figs. 2 f–h ; *T. synapticulosus* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva, I. T. (4),** pp. 41–2, pl. 5, fig. 1 ; *T. botomanensis* **sp. n.** p. 71, pl. 2, figs. 3–4, *muchattaensis* **sp. n.** pp. 71–2, pl. 2, figs. 1–2, Cambrian, U.S.S.R., **Zhuravleva, I. T.** and **Zelenov, K. K.**

†*Tumulocyathus* sp., Cambrian, U.S.S.R., **Zhuravleva, I. T. (2),** p. 32, text-fig. 1.

†Vologdinocyathidae **fam. nov.** p. 1015, for *Vologdinocyathus* **gen. nov., Yaroshevich, V. M. (1).**

†*Vologdinocyathus* **gen. nov.** p. 1015, type species *erbiensis* **sp. n.,** Cambrian, U.S.S.R., **Yaroshevich, V. M. (1),** pp. 1015–6, pl. 1.

†*Vologdinocyathus kolbiensis* **sp. n.,** Cambrian, U.S.S.R., **Zhuravleva, I. T. (3),** p. 151, fig. 2 e.

†*Volvacyathus* **gen. nov.** p. 118, type species *proteus* **sp. n.,** Cambrian, Morocco, **Debrenne, F.,** p. 118, fig. B.